

CLAIMS

What is claimed is:

1. An arrow rest, comprising:
a mounting bracket configured for attaching to a bow;
an arm coupled to said mounting bracket being pivotable relative thereto from a resting position to a pre-launch position, said arm positioned to support a shaft of an arrow relative thereto when said arm is in said pre-launch position;
a clamping mechanism secured to said arm for holding a shaft of an arrow when said arm is in said resting position and releasing the shaft when said arm is in said pre-launch position; and
a linkage mechanism configured for linking said arm to a cable of a bow.

2. The arrow rest of claim 1, further comprising an elongate shaft rotatably coupled to the mounting bracket and attached to the arm.

3. The arrow rest of claim 2, further comprising a pivotable member fixedly attached to said shaft and coupled to said linkage mechanism whereby movement of said linkage mechanism

causes rotation of said pivotable member and rotation of said shaft relative to said mounting bracket.

4. The arrow rest of claim 3, wherein said arm and said pivotable member are on opposite sides of said mounting bracket with said shaft extending on both sides of said mounting bracket.

5. The arrow rest of claim 3, further including a biasing member for biasing said pivotable member relative to said mounting bracket to bias said arm toward said resting position.

6. The arrow rest of claim 1, further including an arrow support member attached to said arm, said arrow support member defining a slot for at least partially receiving a shaft of an arrow.

7. The arrow rest of claim 6, wherein said clamping mechanism is configured to cooperate with said support member for holding the shaft of the arrow relative to said support member when said arm is in said resting position.

8. The arrow rest of claim 1, wherein said clamping mechanism comprises a clamping member having a first portion for holding the shaft of an arrow and a second portion for engaging with an abutment surface to return said clamping member to a clamping position as said arm moves from said pre-launch position to said resting position.

9. The arrow rest of claim 8, wherein said clamping mechanism is biased relative to said arm to an open position so as to automatically open when said arm moves to a pre-launch position.

10. The arrow rest of claim 1, wherein said clamping mechanism comprises a gear assembly for actuating said clamping mechanism from a closed position to an open position as said arm moves from said resting position to said pre-launch position.

11. The arrow rest of claim 10, wherein said gear assembly comprises a rack and pinion gear, said pinion gear engaging teeth on a clamping member for opening and closing said clamping member relative to said arm.

12. The arrow rest of claim 1, wherein said clamping mechanism comprises a pair of clamping members pivotally coupled together so as to grasp a shaft of an arrow when said arm is in said resting position and to release yet support the shaft of the arrow when the arm is in the pre-launch position.

13. The arrow rest of claim 12, wherein said pair of clamping members are biased relative to one another into an open position and are forced to a closed position by abutting against an abutment structure when the arm is moved to the resting position.

14. The arrow rest of claim 1, wherein said clamping mechanism comprises a clamping member secured to a first end of a pivotable arm and a shaft support member secured to a second end of a pivotable arm, said arm being pivotable at a point between said first end and said second end, said clamping member engaging the shaft of an arrow when said arm is in said resting position and releasing the shaft as the arm is rotated causing the shaft support member to lift the shaft of the arrow from the clamping member.

15. The arrow rest of claim 1, wherein said linkage mechanism comprises a linkage member coupled between said arm and a cable slide.

16. The arrow rest of claim 15, wherein said linkage member is resilient.

17. The arrow rest of claim 1, wherein said linkage mechanism comprises a linkage member coupled between said arm and a cable bracket.

18. The arrow rest of claim 15, wherein said linkage member comprises a cable coupled to a biasing member for providing bias in said cable.

19. The arrow rest of claim 18, further including a cable adjustment mechanism for adjusting the effective length of the cable between the mounting bracket and the cable slide.

20. The arrow rest of claim 15, further including a stop attached to a cable guide for abutting against said cable slide when said cable slide is in a resting position.

21. The arrow rest of claim 15, wherein said cable slide comprises a linkage receiving portion for receiving a linkage member, said cable slide capable of moving a distance relative to said linkage member before causing a corresponding movement of said linkage member.

22. The arrow rest of claim 21, wherein said linkage member is comprised of first and second components selectively securable relative thereto for adjusting the length of said linkage member.

23. An arrow rest, comprising:
a mounting bracket configured for attaching to the riser of a compound bow;
a cable guide attached to the mounting bracket;
a cable slide slidably secured to the cable guide and configured for engaging the cable of a compound bow;
an arm coupled to the mounting bracket being pivotable relative thereto from a resting position to a pre-launch position, said arm positioned to support the shaft of an arrow relative thereto when the arm is in said pre-launch position; and
a linkage mechanism coupled between said cable slide and said arm for causing movement of said arm from said resting position

to said pre-launch position as the cable of the bow is drawn.

24. The arrow rest of claim 23, further including a clamping mechanism coupled to said arm for holding the shaft of an arrow when the arm is in the resting position.

25. The arrow rest of claim 23, further comprising an elongate shaft rotatably coupled to the mounting bracket and attached to the arm.

26. The arrow rest of claim 25, further comprising a pivotable member fixedly attached to said shaft and coupled to said linkage mechanism whereby movement of said linkage mechanism causes rotation of said pivotable member and rotation of said shaft relative to said mounting bracket.

27. The arrow rest of claim 26, wherein said arm and said pivotable member are on opposite sides of said mounting bracket with said shaft extending on both sides of said mounting bracket.

28. The arrow rest of claim 26, further including a biasing member for biasing said pivotable member relative to said mounting bracket to bias said arm toward said resting position.

29. The arrow rest of claim 23, further including an arrow support member attached to said arm, said arrow support member defining a slot for at least partially receiving a shaft of an arrow.

30. The arrow rest of claim 24, wherein said clamping mechanism is configured to cooperate with a support member for holding the shaft of the arrow relative to said support member when said arm is in said resting position.

31. The arrow rest of claim 24, wherein said clamping mechanism comprises a clamping member having a first portion for holding the shaft of an arrow and a second portion for engaging with an abutment surface to return said clamping member to a clamping position as said arm moves from said pre-launch position to said resting position.

32. The arrow rest of claim 31, wherein said clamping mechanism is biased relative to said arm to an open position so

as to automatically open when said arm moves to a pre-launch position.

33. The arrow rest of claim 24, wherein said clamping mechanism comprises a gear assembly for actuating said clamping mechanism from a closed position to an open position as said arm moves from said resting position to said pre-launch position.

34. The arrow rest of claim 33, wherein said gear assembly comprises a rack and pinion gear, said pinion gear engaging teeth on a clamping member for opening and closing said clamping member relative to said arm.

35. The arrow rest of claim 24, wherein said clamping mechanism comprises a pair of clamping members pivotally coupled together so as to grasp a shaft of an arrow when said arm is in said resting position and to release yet support the shaft of the arrow when the arm is in the pre-launch position.

36. The arrow rest of claim 35, wherein said pair of clamping members are biased relative to one another into an open position and are forced to a closed position by abutting against

an abutment structure when the arm is moved to the resting position.

37. The arrow rest of claim 24, wherein said clamping mechanism comprises a clamping member secured to a first end of a pivotable arm and a shaft support member secured to a second end of a pivotable arm, said arm being pivotable at a point between said first end and said second end, said clamping member engaging the shaft of an arrow when said arm is in said resting position and releasing the shaft as the arm is rotated causing the shaft support member to lift the shaft of the arrow from the clamping member.

38. The arrow rest of claim 23, wherein said linkage mechanism comprises a linkage member coupled between said arm and a cable slide.

39. The arrow rest of claim 38, wherein said linkage member is resilient.

40. The arrow rest of claim 23, wherein said linkage mechanism comprises a linkage member coupled between said arm and a cable bracket.

41. The arrow rest of claim 40, wherein said linkage member comprises a cable coupled to a biasing member for providing bias in said cable.

42. The arrow rest of claim 41, further including a cable adjustment mechanism for adjusting the effective length of the cable between the mounting bracket and the cable slide.

43. The arrow rest of claim 38, further including a stop attached to a cable guide for abutting against said cable slide when said cable slide is in a resting position.

44. The arrow rest of claim 23, wherein said cable slide comprises a linkage receiving portion for receiving a linkage member, said cable slide capable of moving a distance relative to said linkage member before causing a corresponding movement of said linkage member.

45. The arrow rest of claim 44, wherein said linkage member is comprised of first and second components selectively securable relative thereto for adjusting the length of said linkage member.

46. An arrow rest, comprising:

means for supporting the shaft of an arrow relative to the riser of a compound bow;

means for moving said means for supporting from a resting position to a pre-launch position as the cable of the compound bow is drawn; and

means for clamping the shaft of the arrow relative to the means for supporting when the means for supporting is in the resting position and releasing the shaft of the arrow when the means for supporting is in the pre-launch position.

47. The arrow rest of claim 46, wherein said means for supporting comprises an arm being pivotable from a resting position to a pre-launch position, said arm positioned to support a shaft of an arrow relative thereto.

48. The arrow rest of claim 46, further comprising means for linking said means for supporting to a cable of a bow.

49. The arrow rest of claim 46, further comprising means for mounting said means for supporting to the riser of a bow

50. The arrow rest of claim 46, further including a means for biasing said means for supporting to a resting position.

51. The arrow rest of claim 48, wherein said means for linking further comprises a means for biasing said means for linking relative to said means for supporting.

52. The arrow rest of claim 48, further comprising means for adjusting said means for linking for adjusting the effective length of said means for linking relative to a particular bow configuration.

53. The arrow rest of claim 48, wherein said means for linking further comprises means for allowing a partial draw of a bow before causing a corresponding movement of said means for linking.

54. The arrow rest of claim 48, wherein said means for linking further comprises means for adjusting a length of said means for linking.